UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/598,249	06/21/2000	Masanobu Shimanuki	04329.2324	7295

22852 7590 09/09/2004

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP
1300 I STREET, NW
WASHINGTON, DC 20005

EXAMINER	
D AGOSTA, STEPHEN M	

ART UNIT	PAPER NUMBER
2683	

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/598,249	SHIMANUKI ET AL.	
	Examiner	Art Unit	
	Stephen M. D'Agosta	2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 July 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *23-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *23-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 23-30 have been considered but are moot in view of the new ground(s) of rejection.

1. New art is provided and therefore makes the applicant's arguments moot.

2. The examiner notes that more elaborate dependent claims (and more of them) may have assisted the examiner to identify objectionable material and a more favorable outcome.

3. A new non-final rejection is found below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 23-30 rejected under 35 U.S.C. 103(a) as being unpatentable over Fukumura et al. S 4,611,181 and further in view of Taketoshi et al. JP-08265044A and Wojewoda et al. US 5,777,524 and Osamu JP-09307355 (hereafter Fukumura, Taketoshi, Wojewoda and Osamu [for claims 25 and 29 only]).

As per **claims 23, 25, 27 and 29**, Fukumura teaches a temperature compensating circuit for compensating an operation of temperature detecting means for detecting the ambient temperature of the electronic circuit; and temperature compensating control means (title and abstract) comprising:

first/second storage means (figure 5, ROM #21 has multiple storage addresses/means)

correction processing means for selectively reading, from the first storage means, a corrected temperature corresponding to the ambient temperature detected by

the temperature detecting means, and for correcting the operation of electronic circuit on the basis of the corrected temperature and the operation correction data stored in the second storing means (figure 5, #2, control section)

but is silent on storing corrected temperatures each of which corresponds to one of the detected ambient temperatures, the detected ambient temperatures being within a temperature range which is to be corrected and which is a detection characteristic of the temperature detecting means, and said corrected temperatures being set at values for correcting detection errors in the detected ambient temperatures;

means for storing an operation correction data prepared for correcting a temperature characteristic of the electronic circuit.

The examiner notes that Fukumura uses a comparator to compare two signals and then make a choice as to how to control the oscillating section.

Wojewoda teaches a temperature compensation circuit for a crystal oscillator (title and abstract) that accesses memory/RAM (figure 1, #28) to control frequency output (C2, L12 to C3, L64 which gives an overview of the circuit operation and hence reads on the claim).

Further to this point is Taketoshi, who teaches a transmitter that uses temperature-monitoring to control a transmitter whereby an EEPROM/memory stores offset data quantizing a temperature curve over a temperature range (figs. 3a-b) which reads on use of stored correction values.

With further regard to claims 25 and 29, Fukumura **is silent on** an expectation temperature. The examiner notes that Osamu teaches a frequency correcting means based on temperature that mathematically predicts the temperature characteristic which reads on an "expected temperature".

It would have been obvious to one skilled in the art at the time of the invention to modify Fukumura, such that corrected temperatures are stored, corrections can be applied and expected temperatures are utilized, to provide means for the system to perform quick look-ups and corrections for quick and accurate results as well as anticipating the operational environment.

As per **claims 24, 26, 28 and 30**, Fukumara teaches temperature compensating circuit according to claim 23, wherein said electronic circuit is an oscillator circuit for generating a reference oscillation frequency (figure 5, #3).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 703-306-5426. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stephen D'Agosta
8-23-04